



JOURNAL OF FORENSIC MEDICINE SCIENCE AND LAW

Official Publication of Medicolegal Association of Maharashtra

Editor-in-chief Dr Ravindra Deokar

Associate Editors

Dr Sadanand Bhise Dr Sachin Patil

MULTISPECIALITY, MULTIDISCIPLINARY, NATIONAL PEER REVIEWED, OPEN ACCESS, MLAM (SOCIETY) JOURNAL Indexed with Scopus (Elsevier) & Index Copernicus (Poland)

Editorial Office Address

Department of Forensic Medicine & Toxicology, Third Floor, Library Building, Seth G S Medical College & KEM Hospital, Parel, Mumbai, Maharashtra, India. Pin-400 012. Email id: <u>mlameditor@gmail.com</u> Phone: 022-24107620 Mobile No. +91-9423016325.



JOURNAL OF FORENSIC MEDICINE SCIENCE AND LAW

(Official Publication of Medicolegal Association of Maharashtra) Email.id: <u>mlameditor@gmail.com</u> PRINT ISSN: 2277-1867

ONLINE ISSN: 2277-8853

Original Research Article

Study of Victims of Child Sexual Assault at a Tertiary Health Care Center in Western Maharashtra

Priyanka G Bale^a, Rajesh C Dere^b, Hemant G Kukde^{c*}, Narendra B Kumar^a ^aAssistant Professor, ^bProfessor, ^cProfessor (Additional), Forensic Medicine, LTMMC & LTMG Hospital, Sion, Mumbai, Maharashtra, India.

Article Info	Abstract

Received on: 21.10.2022 **Accepted on:** 02.12.2022

Key words Child Sexual Abuse, Threatening, Pornography, Genital Manipulation. Background: Reporting of child sexual assault cases is increasing day by day since the inception of the Protection of Children from Sexual Offences Act 2012. Child sexual assault not only includes penetrative assault but also various other modes of assault like showing pornographic content, manipulation of genitals or making to do so, fingering, threatening, etc. This study aims to study these various modes of sexual assault in children and Genito anal injuries in relation to age and gender. Materials and Methods: A crosssectional descriptive study among 176 victims of the <18 years of age group with a history of sexual assault (natural and unnatural) was conducted. Results: Out of 176 victims, 148 (84.1%) were females, and the majority of victims 101 (57.4%) were between 13-18 years of age. In this study, we found various modes of assaults, fingering in 74 (42%), history of showing porn in 37(21%), oral stimulation in 55 (31.3%), history of threatening to life or serious injuries in 55.1% of cases. In 6-12-year, age group, most of the cases reported with history of threatening, history of force for touching the accused genitals and showing porn to the victims. Conclusion: Girls and boys are equally affected psycho-socially and physically by child sexual assault. The age group of 6-12 years is more vulnerable to child sexual assault/abuse as these are more approachable and easier to manipulate.

1. Introduction

The prevalence of child sexual abuse (CSA) in India and all over the world is known to be high as children are soft targets because they do not realize that they are being abused. India has the world's largest number of CSA cases: For every 155th minute a child, less than 16 years is raped, for every

13th-hour child under 10, and one in every 10 children is sexually abused at any point in time.¹ The World Health Organisation (WHO) defines CSA as "the involvement of a child in sexual activity that he or she does not fully comprehend and is unable to give informed consent to, or for which the child is

How to cite this article: Bale PG, Dere RC, Kukde HG, Kumar NB. Study of Victims of Child Sexual Assault at a Tertiary Health Care Center in Western Maharashtra. J For Med Sci Law 2023;32(1):15-19.

Corresponding author: Dr. H G Kukde, Professor (Additional), Forensic Medicine, LTMMC & LTMG Hospital, Sion, Mumbai, Maharashtra, India. Email: <u>hkukde@gmail.com</u> (M): +91-9833454105.

not developmentally prepared, or else that violate the laws or social taboos of society.² The term CSA includes a range of activities like "intercourse, attempted intercourse, oral-genital contact, fondling of genitals directly or through clothing, exhibitionism or exposing children to adult sexual activity or pornography, and the use of the child for prostitution or pornography.³

In India, the Protection of Children from Sexual Offences (POCSO) Act, 2012 (that regards any sexual activity with a child below 18 years of a crime) describes various forms of sexual offenses.⁴ Government of India, Ministry of Women and Child Development (MWCD) study in 2007 which interviewed 125,000 children in 13 Indian states revealed that the prevalence of all forms of child abuse is extremely high (physical abuse [66%], sexual abuse [50%], and emotional abuse [50%]). This major state-sponsored survey in India reported the prevalence of CSA as 53%. Boys were equally affected and more than 20% were subjected to severe forms of sexual abuse that included: sexual assault, making the child fondle private parts, making the child exhibit private body parts, and being photographed in the nude.⁵ The National Crime Records Bureau (NCRB) revealed that crimes against children increased by 4.5% in 2019 as compared to 2018. In its report, NCRB stated that as many as 148,185 crimes against children were reported in 2019 in the country. In this, 31.2% of cases of crimes against children were registered under the POCSO Act, 2012. Maharashtra is the state where the maximum number of 8,503 cases under the POSCO Act, 2012 were registered in the country during 2017–2019.⁶ Experiencing child sexual abuse is an adverse childhood experience (ACE) that can affect how a person thinks, acts, and feels over a lifetime, resulting in short- and long-term physical and mental/emotional health consequences. This study analyses types of injuries and various modes of sexual abuse in a child and its relation with age and gender. This will help create awareness and take preventive measures for child sexual abuse in various sectors like law and order, NGO, and the judiciary system.

2. Materials And Methods-

A cross-sectional descriptive study was conducted at the Department of Forensic Medicine and Toxicology, at tertiary care institution between 1st November 2018 and 31st October 2020 after approval of the institutional ethics committee. 176 cases with a history of sexual assault (natural and unnatural) including male and female victims less than 18 years of age were included which fall under sections of IPC 376, 377, & POCSO acts. Each case was examined after taking informed consent from the victim. If the victim was less than 12 years of age, consent from a parent/guardian was obtained. A thorough history without interpretation was noted, and clinical examinations were carried out in Department & Gynaecology ward. All data were entered in MS Excel sheet and statistical analysis was done by using SPSS software. Chi-square & Fisher exact test applied & p-value <0.05 considered as statistically significant finding.

3. Results:

In our study, the victims 101 (57.4%) were observed in the 13-18 years age group followed by 57 (32.4%) in the 6-12 age group (Table- 1).

Table no. 1:	Distribution	of Study	Subjects	according to
the Age and	Gender			

Age (in Years)	Male (%)	Female (%)	Total (%)		
1-5	2 (16.7)	10 (83.3)	12 (6.8%)		
6-12	22 (38.6)	35 (61.4)	57 (32.2%)		
13-18	4 (4.0)	97 (96.0)	101 (57%)		
>18	0.0 (0.0)	6 (100.0)	6 (4%)		
Total	28 (16%)	148 (84%)	176 (100)		

Note: In the above table, victims which are mentioned above 18 years were having history of assault when they were below 18 years but complained later on.

Table no 2: Gender-wise distribution of history of physical assault and other Parameters

History of Physical Assault	Ge	P Value	
and Other Parameters	Female	Male	
History of Physical Assault	58 (39.5)	14 (50.0)	0.544
History of threatening	69 (46.6)	27 (96.4)	< 0.001*
Force for touching the accused's genitals	45 (30.4)	20 (71.4)	0.001*
History of showing porn	22 (14.9)	15 (53.6)	< 0.001*
Anal injuries	1 (0.7)	6 (21.4)	< 0.001*

The gender distribution abiding history of assault shown in table no. 2.

Genitals injuries:

In 118 (79.8%) cases hymen was torn and in 30 (20.2%) cases hymen was intact. Amongst all torn hymen cases, 100 (84.74%) cases showed old hymenal injury, and 18(15.26%) cases showed fresh hymenal injury. Circumferential tears with tags were seen in 73 (61.86%) cases. Hymenal tears are between 6-9 o'clock position seen in 30 (26.27%) cases, in between 3-6 O' clock position in 18 (15.28%) cases, the tear was seen between 12-3' clock position in 8(6.7%) cases. The tear was seen in between 9-12' clock position in 5 (4.23%) cases. In 103 (85.12%)

cases showed smooth edges, 12 (9.91%) cases showed erythematous edges and 6 (4.95%) cases showed erythematous and swollen edges both at a time.

S. No.	Modes of sexual assaults	Age in (Years)				Total	P Value
		1-5	6-12	13-18	>18		
1	Manipulations						
	Rubbing over genitals	1 (8.3)	2 (3.5)	1 (1.0)	0	4 (2.2%)	0.204
	Touching genitals	4 (33.3)	13 (22.8)	11 (11.0)	0	28 (16.2%)	
	Both	7 (58.3)	42 (73.7)	87 (87.0)	6 (100.0)	142(80.6%)	
	No history	0	0	1 (1.0)	0	1 (0.5%)	
2	History of Physical Assault	3 (25.0)	29 (50.9)	37 (37.4)	3 (50.0)	72(42%)	0.553
3	History of Threatening	6 (50.0)	48 (84.2)	40 (40.0)	2 (33.3)	97(55%)	<0.001*
4	History of Force for touching the	4 (33.3)	38 (66.7)	23 (23.0)	0	65(36.9%)	0.001*
	accused's genitals						
5	History of Showing porn	3 (25.0)	24 (42.1)	10 (10.0)	0	37(21%)	<0.001*
6	Oral sex	3 (25.0)	32 (56.1)	20 (20.2)	0	55(31.3%)	<0.001*
7	Anal Injuries						
	Abrasion	0	2 (1.8)	0	0	2 (1.2%)	0.030*
	Oedema & Redness	0	0	1 (1.0)	0	1 (0.6%)	
	Lax anal tone	0	3 (5.3)	0	0	1 (0.6%)	
	Tenderness	0	4	0	0	4 (2.3%)	
	No Injuries	11 (91.7)	53 (93.0)	99 (99.0)	6 (100.0)	169 (96%)	

4. Discussions

In our study, the maximum number of victims 101 (57.4%) were observed in the 13-18 years age group followed by 57 (32.4%) in the 6-12 age group (**Table-1**). Similarly, Sarkar et al⁷ reported the most affected (68.9%) age group between 11-20 years followed by (11.2%) were from the 0-10 years of age group & Al-Azad MAS et al⁸ also found the most affected age group was victims between 11-20 years (69.57 %). Easy availability of mobile phones with high-speed internet services and rampant use of social media increases interaction with known and unknown persons is responsible for the increase in incidences as previously there was no such mode of mass interaction with other unknown people.

The majority of the cases were females i.e., 148 (84.1%) (Table - 1 & 2). Such female preponderance in victims was also noted by Sarkar et al⁷ that out of 90 victims 88.9% were females & 11% were males. M. Maqsood et al⁹ also found out of 27 victims of sexual assault, 22(81.4%) were females and 5 (18.5%) were males. In the 6-12 age group, 40% were males and 60 % were females in contrast to another age group where the maximum cases were only females. Female victims in the age group between 14-18 years are particularly more vulnerable as due to hormonal changes, they get easily attracted to the opposite sex and can get manipulated easily into love relationships. According to the RAINN foundation statistical study from the US department of justice, females aged 16-18 are 4 times more likely than the general population to be victims of rape, attempted rape, or sexual assault, and observed that 82% of all victims under 18 are female and 1 out of every 10 rape victims are male.¹⁰

A history of manipulation with the victim's genitals was seen in 103 cases (58.4%). Force for oral stimulation was seen in 31.3% of cases & history of fingering was reported in 74 (42%) cases. Riggs et al¹¹ found oral assault in 25% of cases. Z Lackew et al¹² found genital fingering cases accounting for 1.8%. Maximum incidences of forceful oral intercourse(fellatio), threatening, showing porn to the victim before the act, and force for touching the accused genitals were seen in the 6-12 age group. (Table-3)

The most common act in male rape is anal penetration, followed by fellatio.¹³ Out of 8 victims with anal injuries, 80 % were males followed by

tenderness (4 cases), abrasion (2 cases), lax anal tone (1 case), and edema (1 case). Similar observations of anal injuries were also made by M. Maqsood et al⁹ (11.11%) and Seree Teerapong et al¹⁴ (21% cases). Bhowmik K et al¹⁵ reported 50% of males had injuries to anal margins. However, Tamuli R P et al¹⁶ found anal injuries in only 2% of cases, all of which were males. (Table 3).

Most of the hymenal tears were old i.e in 104 cases (59.1%), and only 18 (10.2%) cases were reported with a fresh tear. Maximum cases with old healed hymenal tears showed circumferential tears followed by tears at the 6-9 clock position in 17.6% of cases. A similar observation was also noted by Haridas et al¹⁷ that old hymen tears in 91.44% of cases and at multiple positions. Other authors Sarkar SC et al⁸, Bhowmik K et al¹⁵, and Arpana S et al¹⁸ found that maximum cases presented with an old healed tear of the hymen. Al-Azad MAS et al⁸ found hymen injury in 36.91% of cases and the majority of them at 6'o clock position. Iain McLean et al¹⁹ reported the most common location for hymenal tears between the 3 and 9 o'clock position. A majority of the victims (83.5%) in the present study reported after 24 hours of incidence, the chances of finding fresh injuries became less. Moreover in 31.1% of cases as the act was consensual old hymen tears were more commonly found.

Boys as a victim involved in this study mostly belong to age group of 6-12 years. In the same age group, there was a high rate of threatening, a force for observing porn, and a force for touching accused genitals in both sexes. 80% of sodomy cases were males. This signifies the equal need to protect boys as we do girls. Male victims of sexual assault experienced a high level of psychological trauma necessitating those sexual assaults should be considered as equally as severe female sexual assault.²⁰

Force of oral stimulation and manipulation of the victim's genitals was also common in the 6-12 age group. This happens because this age group comprises of children who are innocent, unaware of the accused intention and so easily get into the hands of the older accused. It is seen that 44% of cases were between 16-18 years. Only 10% of cases with recent injuries in this study may be attributed to the delay in reporting the incidence or seeking legal help in the event of violence. Before 2012, the age of consent was 16 years for girls as provided under the Indian Penal Code, section 375, and has been so since the year 1940. POCSO law, 2012 is a special law that raised the age of consent to 18 years, for both boys and girls, followed by an amendment to the Indian Penal Code through the CLA Act, 2013, which did the same.²¹ Now is the time when statutory rape should not be charged under the POCSO Act and so it is important to evaluate the existing laws and reconsider and again minimize the age of consent from 18 to 16 so as to protect adult independency.

5. Conclusion

Incidences of Child sexual assault are increasing day by day in spite of stringent legislation enacted for safeguarding the interest of children. The main culprit is poverty, illiteracy, lack of awareness, rage, compounded by the easy availability of highspeed internet services, and social media. Explicit social media content is very influential nowadays for all types of people ranging from low socioeconomic to higher class people. This study was conducted at a tertiary center in Mumbai to study genital injuries and various modes of child sexual abuse and its relation to age and gender. With growing cases of child sexual assault, it is very important that we need to try to understand the intention of people with whom we are leaving our children.

Understanding the anogenital injury patterns, including frequency and prevalence, that occur with consensual sexual intercourse will help to identify the difference between injury related to consensual vs. non-consensual sexual intercourse. Our study mainly concludes that girls and boys are equally affected psycho-socially and physically in child sexual assault and the age group of 6-12 years is more vulnerable to child sexual assault/abuse as these are more approachable and easier to manipulate necessitating the need for continuous supervision by parents to avoid any kind of child abuse.

There is an urgent need for the government to aggressively awareness drive regarding the legal consequences of sexual intercourse below 18 years of age to the vulnerable group and parent education coupled with strengthening legal aid services are the need of the hour.

Ethical Clearance: IEC approval is taken from the Institutional Ethical committee.

Contributor ship of Author: All authors equally contributed.

Conflict of interest: None to declare.

Source of funding: None to declare.

References:

- Singh MM, Parsekar SS, Nair SN. An epidemiological overview of child sexual abuse. J Fam Med Primary Care.2014;3:430-5
- 2. World Health Organization. Guidelines formedicolegal care of victims of sexual violence. WHO, Geneva. 2003. [cited 12 January 2021]. Available from:

https://apps.who.int/iris/handle/10665/42788

- Putnam FW. Ten-year research update review: Child sexual abuse. J Am Acad Child Adolesc Psychiatry. 2003; 42:269-78.
- The Protection of Children from Sexual Offences Act. 2012. Legislative Department, Ministry of Law and Justice, Government of India. National Informatics Centre (NIC). [Updated 2019 Dec 30; cited 12 January 2021]. Available from: <u>http://www.bareactslive.com/ACA/ACT1509.</u> <u>HTM</u>.
- 5. Study on child abuse, 2007. Ministry of Women and Child Development, Government of India. Contemp Educ Dialogue. 2007; 5:117–20.
- 6. Tyagi S, Karande S. Child sexual abuse in India: A wake-up call. J Postgrad Med. 2021; 67(3):125-9.
- Sarkar SC, Sharma RK, Bhardwaj DN, Dogra TD. A study on victims and accused of sexual offences in South Delhi. Indian J Forensic Med Toxicol. 2010; 4(2):90–3.
- Al-Azad MA, Raman Z, Ahmad M, Wahab MA, Ali M, Khalil MI. Socio-demographic characteristics of alleged sexual assault (rape) cases in Dhaka city. J Armed Forces Med Col, Bangladesh. 2011;7(2):21-4.
- 9. Maqsood M, Butt MA. Incidence of Alleged Sexual Assault Cases in Lahore: It's Medicolegal and Social Aspects. J Fatima Jinnah Med Univ. 2014;8(1):52-6
- Rainn organization. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, National Crime Victimization Survey, 2019 (2020). [cited 12 January 2021] Available on: https://www.rainn.org/statistics/victims-sexualviolence.
- 11. Riggs N, Houry D, Long G, Markovchick V, Feldhaus KM. Analysis of 1,076 cases of sexual assault. Ann Emerg Med. 2000; 35(4):358-62.
- Lakew Z. Alleged cases of sexual assault reported to two Addis Ababa Hospitals. East Afr Med J. 2001; 78(2):80–3.
- Sadock BJ, Sadock VA. Kaplan and Sadock's Comprehensive Textbook of Psychiatry.7th ed. Philadelphia: Lippincott Williams and Wilkins; 2000: 2002-8.
- 14. Teerapong S, Lumbiganon P, Limpongsanurak S, Udomprasertgul V. Physical health consequences of

sexual assault victims. J Med Assoc Thail. 2009; 92(7):885–90.

- 15. Bhowmik K, Chaliha R. A descriptive one-year study on the alleged male and female survivors and accused of sex crimes. J Indian Acad Forensic Med. 2011; 33(3):214-20.
- Tamuli RP, Paul B, Mahanta P. A statistical analysis of alleged survivors of sexual assault: retrospective study. J Pun Acad Forensic Med Toxicol.2013; 13(1):7-13.
- 17. Haridas S, Nanandkar SDS. Medicolegal study of alleged rape victim cases in Mumbai region. Int J Med Toxicol Forensic Med. 2016;6(1):12–22.
- Arpana S, Vineeta G, Kavita Y. A Retrospective Study of Alleged Female Survivors of Sexual Abuse. Ind J App Res.2015; 6(5):350-2.
- 19. McLean I, Roberts SA, White C, Paul S. Female genital injuries resulting from consensual and nonconsensual vaginal intercourse. Forensic science international. 2011; 204(1-3):27-33.
- 20. Duchesne S, Seyller M, Chariot P. Male sexual assaults in the Paris, France area: An observational study over 8 years. Forensic Sci Int. 2018; 290:16-28.
- 21. Pitre A, Lingam L. Age of consent: challenges and contradictions of sexual violence laws in India. Sexual and reproductive health matters. 2022 Jan 1;29(2):1-14.